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CLIMATE OF THE YUKON TERRITORY

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CLIMATE OF THE YUKON TERRITORY

The climate of the Yukon Territory is commonly supposed to be sterner that it actually is. Along with large parts of the provinces the Yukon, its northern extremity excepted, is classified as a subarctic rather than an arctic region. Although the Yukon winter is characteristically rigorous and long, its severity is easily exaggerated. Average daily mean temperatures in January the coldest month of the year, are little different in the southern Yukon from those reported for Winnipeg and Saskatoon. A broader and more revealing comparison is furnished by average daily mean temperatures throughout the five coldest months of the year, November through March. The average for Whitehorse at 10 degrees above zero is the same as for Saskatoon and one degree warmer than for Winnipeg. In the Mayo mining district the average at 2 below is only 6 degrees colder than at the mining centre of Flin Flon, Manitoba. It is in length of winter that such comparisons become less favourable to the territory. The average frost-free periods of 78 days at Whitehorse and 64 days at Mayo stand in sharp contrast to 112 days at Saskatoon.

The Yukon summer, though short, is pleasantly warm. The average daily mean temperature in July at Mayo is 58 degrees,

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only seven and eight degrees lower than those reported for Saskatoon and Flin Flon respectively. More noteworthy is the fact that for the period from June through August the corresponding differences in temperatures are much the same. Precipitation, as both snow and rain, is generally light.

The economic significance of the territory's climate has several facets. In part by its dictates the resources of workable agricultural and forested lands are relatively limited. Because economic expansion will depend largely on the development of the Yukon's massive mineral wealth, the impact of climate on the mining industry is of special interest. Climate adds to this industry's costs in several ways. At properties in the production and reproduction stages it limits the season and increases the cost of certain types of construction and development work, and for new mines has the effect of lengthening their preproduction period with its attendant costs. It likewise adds to heating costs, to an extent which may be provisionally measured from data on degree-days of heat. By definition, for any one day when the mean temperature is less than 65 degrees, this temperature being selected as the base, there are as many degree-days as there are Fahrenheit degrees difference in temperature between the mean temperature for the day and 65 degrees. Annual totals of these degree-days broadly measure annual heating requirements. On this basis, heating costs at Mayo are 50 per cent higher than in the Sudbury mining district and 15 per cent higher than at Flin Flon. Again, climate acts to add to the wage bills of mining operations. While it is not possible to establish the significance that these costs assume in total, it is clear that they do represent a burden for the mining industry. They do not offer, however, a serious physical problem for this industry's economic development.

COMPARATIVE CLIMATIC DATA: AVERAGE DAILY MEAN TEMPERATURES IN SELECTED MONTHS, FOR SPECIFIED LOCATIONS IN THE YUKON TERRITORY AND ELSEWHERE IN CANADA.

Location	Years of observation	January	July	November-March	June-August
Yukon					
Whitehorse	10	5	56	10	55
Watson Lake	12	-7	59	2	57
Mayo Landing	26	-11	58	-2	56
Dawson	30	-16	60	-6	58
N.W.T.					
Yellowknife	10	-18	60	-8	57
Port Radium	11	-15	54	-7	51
Quebec					
Chibougamau	14	-3	61	8	58
Knob Lake	5	-13	55	1	52
Ontario					
Porquis Junction	12	1	64	11	61
Sudbury	16	10	66	18	64
Manitoba					
Winnipeg	66	-	67	9	64
Flin Flon	23	-7	66	4	62
Saskatchewan					
Saskatoon	38	-1	65	10	62
Alberta					
Edmonton	56	6	62	16	60

Source: Meteorological Division, Department of Transport.

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